Virtually a girl: Gender identification in Second Life

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1. Introduction

Virtual worlds are becoming less and less a niche phenomenon and are being used for a wider range of applications, including education. In 2006, Book noted that "for better or for worse, virtual worlds will increasingly function as centres of commerce, trade, and business." (Book, 2006). All interactions in these worlds are mediated by avatars which supposedly represent the user's identity. In this work we consider the relationship that users have to their avatars and whether gender plays a role in this relationship. In particular we examine whether changing the gender of the avatar away from the user's real-life gender affects this relationship.

Our gender is a key part of our identity which affects how we perceive and interact with ourselves and others. Although some virtual worlds have become havens for those wanting to experiment with concepts of identity and gender (Alrayes and Sutcliffe, 2011), the work described here used "disinterested" users, those with no previous experience and who are less likely to have an active interest in exploring notions of identity in the virtual world. For these users we have examined to what extent our perceptions of our gender and identity permeate into the virtual world.

2. Background

Second Life® is a perhaps the most well-known virtual world environment and part of its appeal is the ability to challenge traditional roles and expectations (Alrayes and Sutcliffe, 2011) making it 'a valuable space in which to study gender and sexuality in cyberspace' (Brookey, 2011, 571). The internet and virtual worlds in particular, have been seen as places for people to experiment with gender, highlighting discourses about gender fluidity. Armentor-Cota (2011, 24) term this as the debate between 'gender fluidity and gender reproduction.'

Virtual worlds typically involve more fictional representations of the self (avatars) than other online arenas (Benwell and Stokoe, 2006). In Second Life®, the participants can customise the appearance of their avatar in terms of gender, body shape and clothing (amongst others) and there has been

debate about whether the stereotypes that exist in the offline world do, or do not, continue in the online world (see, for example, Kapidzic and Herring, 2011). What can be established is that appearance of the avatar does matter for many of the participants (see the study by Van der Land *et al. 2015*). How the avatar looks, the clothing and body shape all 'convey information' about the avatar, if not about the participant (Fong and Mar 2015).

Identification with their avatar is important in determining the relationship a user has with it. For example, Van der Land et al. (2015, 144) found that if people did not identify with the avatar, there was a lack of responsibility attached with regards to how that avatar behaved and the real life person tended to view it as a tool for game playing (Song and Jung 2015). So whilst avatars tend to be described as 'representations of the self (Van der Land *et al.,* 2015, 129), this may vary depending on whether that person perceives the avatar as a representation of themselves or as a tool to play a game in an online world. Meadows (2008 cited in Belk 2013, 481) suggests that if people make an avatar 'of the same gender, age, and race, it feels like you on a psycho-physiological level.' If the avatar looks similar to our real life selves, it is more likely that we will have some attachment to the avatar. This could lead to an 'emotional bond or tie between a player and an avatar' (Song and Jung 2015, 6).

Alrayes and Sutcliffe (2011, 9) suggest that people often prefer to keep their real life identities when they venture into the online world and, given this, it is perhaps not unsurprising that most users tend to use their own gender as the gender of the avatar (Roberts and Parks, 2001). Whilst there are instances of gender swapping in the online world, it being easier than in the real world, Milestone and Meyer (2012, 174) suggest that it is actually unclear how much this actually happens.

Sometimes when people do change their gender, this reinforces caricatures and stereotypes in a kind of hypergendering that occurs (Armentor-Cota 2011). Goffman (1990, 45) has argued that 'the stereotypes of the real world will usually continue in the online world, as it is still a performance for

the benefit of others' which would naturally include elements of 'clothing, sex, age, size, looks, posture, bodily gestures' (Goffman 1990, 32).

3. Methodology

3.1. Experiment

Two cohorts of students from a small UK university (23 in each evenly split between males and females) aged between 18 and 21 who were not familiar with Second Life®, i.e. did not have an existing account, were required to create an online avatar. They were given no direction to create this avatar beyond the constraints of the software. The participants were initiated into this virtual world through the establishment of a "private" island. This island had a café, meeting place and virtual seminar room. They were trained in basics of the virtual world through a series of challenges including navigation, chatting, teleportation and drinking coffee.

Participants were then asked to attend an experiment in a communal computer room at the university. The experiment lasted for two hours. Participants were asked to complete a series of challenges and exercises within the virtual world. One hour into the session participants were asked to change their avatar to one of the opposite gender. They were allowed to design their new avatar, i.e. they could also change the appearance, body shape/size and clothing. They were asked to continue the exercises and challenges with this new avatar until the end of the session. Participants were allowed to revert to their original avatar at any point.

3.2. Data collection

Data was collected in three ways: through a paper-based questionnaire, a reflective blog and through online focus groups (within Second Life®). The questionnaire contained seven closed questions on their experiences through the experiment and thirteen open ended questions, in addition to socio-demographic information. 34 participants completed the questionnaire of which 55% defined themselves as males and 45% females.

The questionnaire focused on aspects of identification such as 'did you perceive the original avatar as, alternative creation of you, someone separate from you, other?' and 'did you consider the original avatar to be an "it", "him" or "her"?', as well the importance of appearance and behaviour. The open ended questions allowed discussion of reasons behind their choices.

Eight focus groups were conducted at the cafe area of the Island, where the avatars were invited to sit at a table. Minocha *et al.* (2010, 14) suggests that the cafe area works well in the online environments. The students did not use their real names in order to protect their anonymity, although their gender was disclosed during the focus group.

The participants were asked questions about their avatar from a focus group schedule of questions, or 'discussion guide' (Sweet 2001, 132). Although similar themes were discussed as in the questionnaire, namely identity, appearance and behaviour, primarily participants were questioned on the experience of changing gender. Participants were able to see the questions and responses from the group as these were typed using the chat function available in Second Life®. The text editor was kept open during the focus group so that information could be recorded for later analysis and to enable the group to see who was writing.

43 participants additionally completed a reflective blog online which involved discussing their experience of changing the gender of their avatar. These blogs were anonymous.

3.3. Data analysis

The blogs, focus group and open ended questions on the questionnaires were analysed in order to discover emerging themes that were subsequently were defined in more detail (Ross and Green, 2011). A "Braun and Clarke" approach to thematic analysis was adopted involving 'searching across a data set...to find repeated patterns of meaning' (Braun & Clarke 2006 p. 86). The transcribed data was read and re-read several times (Fielden, Sillence & Little, 2011). Both authors participated in this activity to ensure accuracy and validate the emerging themes. Four main themes

emerged: appearance, behaviour, experience of changing gender and identification with the avatar and here we will discuss three of these (excluding behaviour).

4. Results

Participants overwhelmingly initially chose an avatar of the same gender as their real-life gender (87%). Of those who did not, seven participants chose animal / non-human avatars, two of which showed a clear gender (see, for example, Figure 3), and only one chose the opposite gender.

Figure 1: Typical female avatar

Figure 2: Typical male avatar

Figure 3: Gendered non-human avatar

4.1. Appearance

In our study, females cared more than males about the appearance of their (original) avatar. This was supported by a statistical analysis of the questionnaire data $\chi^2(1)=3.92$, $p<0.05$ [1 tailed] as well as through the thematic analysis of the open ended questions. Females chose physical attributes and clothing similar to their own but preferred aspirational body shapes e.g. thin. "For my original character it was because it was an extension of myself but for changed gender not so much because it wasn't really 'me.'". Males on the other hand typically reported using (self-defined) normal or average body shape and physical attributes, regarding their projection as unimportant in the virtual world: "Just a normal looking man and a normal looking woman".

4.2. Changing Gender

On swapping the gender of the avatar both men and women were found to care less about appearance ($\chi^2(1)=6.52$, $p<0.01$ [1 tailed] and reported that they did not consider the clothes or appearance to be as important as for their original avatar:

> *"When I changed the gender of my avatar, my feelings towards it did change. For example, when changing my female avatars clothes I did feel slightly embarrassed if others were around. However, once I changed it to a male avatar, its behaviour and the changing clothes did not bother me as I could not relate to this avatar and did not see it as a reflection on me."*
>
> Female Participant

In the focus groups males generally reported feeling no difference on changing gender (65%), whereas females reported a wide range of emotions, including positive, negative and "strange" with 60% reporting feeling “odd” or “awkward”. One female noted: "my avatar is

the same gender and when we changed it earlier this week it didn't feel right". Significantly more females changed back to their original avatar (31%) compared to males (7%) typically in less than 7 minutes.

4.3. Identification

From the thematic analyses we found that females identified much more with their original avatar (70%) than did males (23%) and less with the changed avatar. This identification was in terms of the physical representation of their avatar, females seeing it as a virtual representation of themselves. Even females who reported that they did not feel a connection to their avatar, still apparently created it to resemble themselves: "Although I did not feel any connection to my avatar I felt that it would be deceiving to alter it completely differently to my realistic features - my avatar was therefore, female." Males on the other hand did not statistically identify with either avatar $\chi^2(2)=5.8$, $p<0.05$ [2 tailed].

5. Discussion

It is clear that females identified more with their original avatar than males, evidenced by more care taken with the appearance and the increased use of the personal pronoun (“she”). There was a clear association between their real-life persona and the associated avatar: "I created an avatar myself and found that I have become quite attached to it. To me, it depicted myself but online." This identification with the avatar was broken when they changed the avatar to male.

> *"I had changed the gender of the avatar, it didn’t feel as though it was me anymore and I was not as bothered about the appearance of the avatar because I didn’t feel as connected to it. I said I was more comfortable having the gender of the avatar the same as my own because it felt strange pretending to be someone I wasn’t."*

Female participant

It is interesting to consider whether this breaking of identification is related to the different gender of the new avatar or to its changed appearance. Goffman proposed the notion of 'self-distantiation' (Goffman 1990, 87) in which a 'person comes to feel estranged from himself [/herself]' when the person does not see an avatar as a valid representation of themselves. Certainly we found that females felt uncomfortable with an avatar that they felt did not represent them, whereas males did not seem as concerned. Mulvey notes that females are 'born to be defined by their physical attributes' and that they are constantly confronted with their image (Mulvey 1991, 3). This is especially true in online environments such as social media or virtual worlds in which your image is present in every exchange. The ability to "like" an image on Facebook has perhaps increased the concept of judgement based on image alone (Richardson and Wearing, 2014). In our experiment females chose similar representations to their real world counterpart but more aspirational in terms of stereotypes of femininity. For example, one female commented: 'I like red hair, and have never been brave enough to have very red hair but in Second Life® I did have bright red hair.' Another female noted: 'I think I changed the avatar to how I would change myself if I could.'

Those who chose non-human avatars still identified these avatars with a gender, indicating that gender might be a fundamental aspect of identity (Giles and Middleton, 2008), at least online (see Vermeulen and Van Looy, 2014). The deep-seated discomfort on a change of gender might support this argument, though it could be argued that this was more due to the new avatar having a very different appearance to the original. Certainly in the virtual world the idea of gender and appearance are strongly correlated – it is very hard to have a "male" character with a "female" appearance.

Males, on the other hand, typically have far more experience with characters that do not represent them physically through video games which males play significantly more than females (Quandt *et al.,* 2014). Even when offered the opportunity to create an avatar that represented them, males typically chose either “standardised” or significantly “different” characters.

> *"As I said previously this experience was not something new for me, changing my gender or wear[ing] different clothes because I play a lot of games where I can customize my character"*
>
> Male participant

These previous experiences have perhaps led to a lack of identification with computer representations of themselves and thus gender and appearance are less important: "I started out as male and ended up female but I didn't feel any different because I didn't believe it was me". Males clearly are more used to “playing” characters rather than “being” characters.

For males this lack of identification with the avatar is indicative of a lack of emotional attachment to it. For females, however, this identification with their avatar has the potential to develop into an emotional attachment: "I see it [my avatar] as something separate, but I think if I was using second life a lot more, my opinion would probably change". For females, there is a deep identification of self with their image. One female noted: ‘I see it as myself but in an internet form…I chose long hair because I have long hair in real life’ whilst another female identified so strongly that they felt embarrassed at changing clothing: ‘when I was editing the clothing I was actually feeling embarrassed hoping no one was watching as mine was changing.’; females are constantly confronted with aspirational images in contemporary culture (Wykes & Gunter, 2005) and this judgment of self through image clearly has continued into the virtual world.

Virtual worlds have often been considered a place where it is possible to experiment and escape from the pressures and expectations of gendered identity (for example Turkle, 1995), and there are many examples of those seeking out the virtual world in order to take advantage of this. However not all participants in virtual worlds approach it as a chance to explore their concept of identity (Kendall, 2011). Virtual worlds are likely to become more prevalent in contemporary culture and our work indicates that the attitude and approach to avatar selection is fundamentally different between the sexes. This has significant implications for the virtual world industry and our relationship to it.

For users of virtual worlds, which increasingly includes educational establishments, it is important to understand the relationship that users have with their avatar. Females are significantly less likely to engage with an avatar that they feel does not represent them: "I didn't enjoy acting as someone else", and are less likely to view the experience as a game. There is value in both developing and using software that allows more fine-grained characterisations of appearance otherwise the potential benefits of using virtual worlds might be lost through feelings of awkwardness and discomfort.

As virtual worlds become more ubiquitous it is perhaps important to encourage awareness that people's attitudes towards their avatars in terms of appearance, behaviour and gender can vary quite significantly. Males tend to view their avatars as a character they are playing whereas females tend to view it more as an extension of themselves. Given the social nature of virtual worlds we would posit that this understanding is essential to users being able to construct a harmonious online culture.

6. Summary

46 "novice" virtual world users were introduced to Second Life® and asked to create an avatar. Once familiarised to the environment they were given a series of tasks to complete

with their avatar before being asked to change their avatar to one of the opposite gender. On completion of the experiment participants answered a questionnaire, attended an online focus group (in Second Life®) and created a reflective blog. These were analysed using a mixed methods approach and three distinct themes emerged: the appearance of the avatars, the level of identification with the avatars and the experience of changing gender.

We found that females were far more likely to identify with their original avatar and to change back from the changed male avatar when given the opportunity. Females rated the appearance of the original avatar more highly than males but neither males not females valued the appearance of the changed gender avatar and were more likely to use an impersonal pronoun ("it") to describe it. Females reported more discomfort on the change of gender whereas males were more used to playing a character of a different gender through their gaming experiences and did not report any emotional attachment to their avatar. We suggest that this is a natural evolution of the stronger identification of self with image that females reportedly experience.

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8. Figures

Figure 4: Typical female avatar

Figure 5: Typical male avatar

Figure 6: Gendered non-human avatar

Typical Female Avatar
9x23mm (300 x 300 DPI)

Typical Male Avatar
7x11mm (300 x 300 DPI)

Gendered Non-human Avatar
57x86mm (300 x 300 DPI)